Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Original) An apheresis method comprising the steps of:
   a) drawing blood from a mammal;
   b) adding an amount of anticoagulant effective in preventing coagulation;
   c) extracting one or more constituent components from said blood, wherein said extracting results in extracted blood and constituent component; and
   d) diminishing the activity of said anticoagulant in said extracted blood by introducing an antidote, wherein the amount of antidote introduced is coupled to the amount of anticoagulant added.

2. (Original) The method of claim 1, wherein said mammal is a human.

3. (Original) The method of claim 1, wherein said anticoagulant is chosen from a citrate compound, heparin, EDTA, or combinations thereof.

4. (Original) The method of claim 3, wherein said citrate compound comprises dextrose, citric acid, trisodium citrate, or combinations thereof.

5. (Original) The method of claim 4 wherein said citrate compound comprises ACD-A.

6. (Original) The method of claim 1, wherein said one or more constituent components are platelets, leukocytes, erythrocytes, plasma, or mixtures thereof.

7. (Original) The method of claim 1, wherein said antidote comprises calcium, magnesium, potassium, or combinations thereof.

8. (Currently amended) The method of claim 7, wherein said antidote ~~calcium compound~~ is calcium chloride, calcium gluconate, or mixtures thereof.

9. (Currently amended) The method of claim 7, wherein said antidote ~~magnesium compound~~ comprises magnesium sulfate.

10. (Original) The method of claim 1, additionally comprising returning said extracted blood, said anticoagulant, and said antidote to said mammal.

11. (Original) The method of claim 10, wherein the apheresis is discontinuous.

12. (Original) The method of claim 10, wherein said apheresis is continuous.

13. (Original) The method of claim 1, wherein said blood comprises whole blood.

14. (Original) The method of claim 10, wherein said calcium compound is introduced from about 0.25 to 1.5 mg calcium ion/mL of said anticoagulant.

15. (Original) The method of claim 14, wherein said calcium compound is introduced from about 0.5-1.0 mg calcium ion/mL of said anticoagulant.

16. (Original) The method of claim 15, wherein said calcium compound is introduced from about 0.5-0.6 mg calcium ion/mL of said anticoagulant.

17. (Original) The method of claim 5, wherein the concentration of said citrate ranges from about 1-500 mg/mL.

18. (Original) The method of claim 17, wherein the concentration of said citrate ranges from about 15-30 mg/mL.

19. (Original) The method of claim 18, wherein the concentration of said citrate ranges from about 20-25 mg/mL.

20. (Original) The method of claim 19 wherein the concentration of said citrate compound is about 21 mg/mL.

21. (Original) The method of claim 1, wherein the ratio of mmoles of said antidote to mmoles of said anticoagulant ranges from about 0.01-1.

22. (Original) The method of claim 21 wherein the ratio of mmoles of said antidote to mmoles of said anticoagulant ranges from about 0.01-0.2.

23. (Original) The method of claim 22 wherein the ratio of mmoles of said antidote to mmoles of said anticoagulant ranges from about 0.1-0.15.

24. (Original) The method of claim 4, wherein the amount of citrate in said anticoagulant administered to the donor ranges from about 0.8 mg/kg body weight of said mammal/minute to 6 mg/kg body weight of said mammal/minute.

25. (Original) The method of claim 1, wherein the rate of delivery of said antidote is from about 0.001 -1.5 times the rate at which the blood is withdrawn from said mammal.

26. (Original) The method of claim 25, wherein the rate of delivery of said antidote is from about 0.05-1. times the rate at which the blood is withdrawn from said mammal.

27. (Original) The method of claim 26, wherein the rate of delivery of said antidote is from about 0.1-1.2 times the rate at which the blood is withdrawn from said mammal.

28. (Original) The method of claim 1, wherein the blood is drawn from a canine.

29. (Original) The method of claim 1 wherein the step of drawing blood additionally comprises drawing from about 50 ml to 60 L of blood.

30. (Original) The method of claim 1 wherein the step of drawing mammalian blood additionally comprises drawing from about 1 to 25 L of blood.

31. (Original) An apheresis machine for completing the method of claim 1, wherein said apheresis machine couples the delivery of said antidote and said anticoagulant.

32. (Original) The method of claim 1, wherein the antidote is introduced to the extracted blood.

33. (Original) The method of claim 32, further comprising returning a mixture of the extracted blood and the antidote to the patient.

34. (Original) The method of claim 1, wherein the antidote is introduced to the mammal.

35. (Original) The apheresis machine of claim 31, wherein said apheresis machine is under automatic control.

36. (Original) An apheresis machine comprising an antidote delivery conduit, wherein the antidote delivery conduit introduces an amount of antidote that is coupled to an amount of anticoagulant delivered.

37. (Original) The apheresis machine of claim 36, wherein said coupling is accomplished by utilizing the same pump for delivery of said anticoagulant and said antidote.

38. (Original) The apheresis machine of claim 36, wherein said coupling is accomplished by electrically connecting a pump for delivery of said anticoagulant with a pump for said antidote.

39. (Original) The apheresis machine of claim 36, wherein said coupling is accomplished by computer circuitry between a pump for delivery of said anticoagulant with a pump for delivery of said antidote.

40. (Original) The apheresis machine of claim 36, wherein said coupling is accomplished by preparing said solutions of anticoagulant and antidote so that the amount of antidote delivered is correlated to the amount of anticoagulant delivered.

41. (Original) The apheresis machine of claim 36 wherein the anticoagulant solution is coupled to the antidote solution via the delivery rate of the solutions.

42. (Original) The apheresis machine of claim 36 wherein the anticoagulant solution is coupled to the antidote solution via an electrical connection between the pumps that deliver the anticoagulant solution and the antidote solution.

43. (Original) The method of claim 1, wherein said constituent component comprises leukocytes.

44. (Original) The method of claim 1, wherein said constituent component comprises plasma.

45. (Original) The method of claim 44, further comprising the step of adding additional anticoagulant to said extracted blood.

46. (Original) The method of claim 45, wherein said amount of antidote added is coupled with said additional anticoagulant added.

47. (Original) The method of claim 1, wherein the blood is drawn from a primate.